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THE SOCIAL-ECONOMIC CLASSES OF THE POPULATION OF THE UNITED STATES. I

Economic theory has, from its inception, divided society into economic classes distinguished according to the functions performed by them in the production and distribution of wealth. The classification scheme of the economist applies to a democracy where "all men are born free and equal," as much as to an aristocracy where class or caste distinctions are fixed by law. Our population statistics, however, have heretofore taken no cognizance of economic classes. The reports of the federal censuses merely classify the population by occupations. General Walker, the superintendent of the Tenth Census, suggested an additional inquiry in order to determine "the number of persons working for themselves and sharing in the profits of business, as distinguished from those receiving wages or salary,"¹ but the suggestion never took practical shape. The instructions to enumerators at the Twelfth Census required them to distinguish, in the description of occupations, employers from employees, but the instructions were not strictly followed. No use was made of this distinction in the report of the Twelfth Census on "Occupations." The Thirteenth Census is the first in which a separate inquiry has been inserted in the population schedule, dividing all bread-winners into employers of labor, wage-earners, and persons working for themselves. The forthcoming reports of the Thirteenth Census, when published, will accordingly open up a new field for the economic and sociological student. The figures of the Thirteenth Census, however, will record only a static social condition. In order to analyze the dynamic tendencies of modern industrial society, a comparison of the statistics of the Thirteenth with those of the previous censuses will be necessary.

To furnish a basis for such a comparative study is the object of the present article.

The reports of the four censuses taken after the abolition

¹ "Occupations," *Twelfth Census*, p. xix.

of slavery have been analyzed here with a view chiefly to tracing the distinction between entrepreneurs and employees. As stated in the introduction to the report of the Twelfth Census on "Occupations," "this distinction would often be indicated by the designation of the occupation." These designations have been retained in the tables of the report on "Occupations"; an examination of them, compared with the statistics of manufactures and of mines and quarries, has enabled me to cover in my classification 94 per cent of all persons "engaged in gainful occupations." The remaining 6 per cent represent occupations in which the line between persons working for themselves and those working for wages cannot be definitely drawn.

In Table I of the report on "Occupations," we find 1,252,917 persons whose occupations were imperfectly returned ("not specified," or "not otherwise specified"); this number constitutes 4.3 per cent of the total engaged in gainful occupations. In other words, the classification by specified groups of occupations covers 95.7 per cent of the total engaged in gainful labor. Accepting this table as a standard, the classification proposed in this article, covering as it does 94 per cent of the same total, may be regarded as sufficiently complete for statistical purposes.²

I. BASIS AND METHOD OF CLASSIFICATION

It requires little effort to devise a scheme of classification by the deductive method. But as soon as an attempt is made to apply such an abstract scheme to the phenomena of real life, the student is baffled by the endless variety of transitional forms. Natural science today finds it impossible to draw the line between animal and plant life. Recent researches on the phenomena of crystallization threaten even to efface the line between animate and inanimate existence. Similar difficulties are encountered in every classification of human society, which has led a Fabian writer in a recent issue of the *Quarterly Journal of Economics* to deny the very existence of classes in modern society, at least for all practical purposes. Yet, just as we find no difficulty in assigning a vertebrate and a tree to distinct

²The writer desires to make acknowledgment of the able assistance of Miss Eva A. Joffe to whom credit for the compilation of all the tables is due.

realms of nature, although a bacteriologist might hesitate where to place certain microbes, so in a complex society like ours the existence of a few leading classes should not be obscured by the recognition of the parallel existence of intermediate or transitional social groups. To be sure, it is impracticable to apply to the occupation groups of the census the familiar classical division of society into landowners, entrepreneurs, and laborers. We may accept as satisfactory a scheme of classification which divides the population into indecomposable social groups or strata, in such a manner as to leave every student at liberty to combine them into social classes in conformity with the requirements of his own theory.

The occupation statistics of the Twelfth Census lend themselves to a classification into the following ten subdivisions, which we shall here call "groups," in order to avoid all quibbling over the meaning of the term "class":

1. Farmers
 1. Members of farmers' families, returned as farm laborers
 3. Farm and plantation laborers, not members of family
 4. Entrepreneurs, comprising those classed by the census under Domestic and Personal Service, Trade and Transportation and Manufacturing and Mechanical pursuits
 5. Professional and quasi-professional service, comprising persons classed by the census under "professional service," as well as various occupations of a quasi-professional character, classed under Domestic and Personal Service, and Trade and Transportation, such as sextons, nurses and midwives, soldiers, letter carriers, etc.
 6. Agents and commercial travelers
 7. Salaried employees, except salesmen, saleswomen, cash and bundle boys
 8. Selling force, comprising salesmen, saleswomen, cash and bundle boys
 9. Industrial wage-earners, comprising all wage-earners except farm laborers
 10. Domestic servants

There still remain a number of occupations too imperfectly described to permit of their classification under any one of the social groups just enumerated, e.g., "barbers" or "teamsters," these designations being equally applicable to entrepreneurs and to wage-workers. All such occupations have been thrown into a separate group designated as "unclassified."

The data for this classification are furnished by Table I

of the Census report on Occupations: "Total persons 10 years of age and over, engaged in each of 303 specified occupations, classified by sex." These 303 occupations are combined into five great divisions: (1) Agricultural pursuits, (2) Manufacturing and mechanical pursuits, (3) Trade and transportation, (4) Professional service, (5) Domestic and personal service. The manner in which the 303 specified occupations have been reclassified for the purposes of the present study will next be shown in detail for each of the five census divisions of occupations.

Agricultural pursuits.—The instructions to census enumerators (Nos. 166 to 173) required them to distinguish clearly between farm help and farmers or other independent producers engaged in "Agricultural Pursuits." This great division can therefore be classified into the following social-economic groups: (1) "farmers and planters," (2) "farm and plantation overseers," (3) "farm and plantation laborers" and "garden and nursery laborers," and (4) "farm laborers (members of family)."

It is evident that the first subdivision³ represents independent farmers, the second, salaried employees, the third, farm hands not members of the employer's family, and the fourth, members of the farmer's family who share in his labors and its products, though the ownership is vested in the head of the family.

It appears, however, that in some cases the enumerators did not follow their instructions. As a result, "Agricultural Pursuits" include occupations in which no accurate distinction between employers and employees is possible, viz.:

	Total	Males	Females
Turpentine farmers and laborers.....	24,735	24,454	281
Wood choppers.....	36,265	36,152	113
Lumbermen and raftsmen.....	72,190	72,090	100
Not specified.....	4,233	4,037	196
Total.....	137,423	136,733	690

³Including "farmers (members of family)," milk farmers, dairymen and dairywomen, gardeners, florists, nurserymen, wine-growers, stock-raisers, sheep herders and drovers, and apiarists.

These occupations have, therefore, been referred to the "unclassified" group.

There is some discrepancy between the statistics of Occupations and the statistics of Agriculture, as shown in the following tabular statement:

	Statistics of Occupation	Statistics of Agriculture
Total employed on farms (exclusive of wood choppers, lumbermen, and raftsmen)	10,329,734	10,329,734
Farm owners and tenants	5,701,335	5,650,319
Others than owners and tenants (members of family and hired persons)*	4,628,399	4,679,415

* Includes 4,459,346 agricultural laborers and 169,053 "farmers, members of families."

The exact agreement of the total number of persons engaged in agriculture, while there is a discrepancy in the number of farm owners and tenants, on the one hand, and agricultural laborers, on the other, indicates that the total obtained by the population enumerators was accepted by the Division of Agriculture and the deficiency in the number of farm owners and tenants was made up for by an addition to the number of "agricultural laborers, members of family." Indeed, the line between "farmers, members of family," and "agricultural laborers, members of family," cannot easily be drawn. Still the discrepancy is equal to only 51,016 persons, or 0.5 per cent of the total number of persons engaged in agriculture, and may be treated as a negligible quantity.

A considerable portion of those designated as agricultural laborers are probably engaged a part of the year in other pursuits. This is apparent from the fact that the total expenditure for farm labor in 1900 was reported as \$365,305,921 ("Agriculture," Part I, p. cxxviii), which averaged \$175 per year, including board, for every hired laborer not a member of his employer's family. It is evident that those who are designated as agricultural laborers must have had some other employment in addition to farm work.

The greatest number employed in manufactures at any one time during the year, as computed by the Census of Manufac-

tures, was 7,069,144. This is the aggregate of the greatest numbers reported by each manufacturer; as the busiest days did not coincide in all establishments, the actual greatest number employed must have been short of this total.

The number of wage-earners employed in manufactures has been estimated below at 5,560,863 persons. The difference between these two numbers, 1,508,281, represents the maximum of opportunities of employment offered to the 2,093,033 agricultural laborers by the manufacturing industries. What were the opportunities in trade and transportation and domestic and personal service, the Census statistics do not show.

Professional service.—No attempt has been made to carry the distinction between employers and employed into this class. While a very large proportion of persons engaged in professional service are employed on a salary, yet the distinction between employers and employed within this class has not the same sociological meaning as in manufacturing industries; the chief engineer of a railroad company, though from an economic point of view a salaried employee, belongs to the same social stratum as the consulting engineer who conducts his own office and employs a corps of assistants.

Trade and transportation.—Among “entrepreneurs” are included “hucksters and peddlers,” inasmuch as they represent individual enterprise on a small scale, as distinguished from salaried employees and wage-earners.

“Agents and traveling salesmen” form a separate group, distinct from “proprietors” as well as from “salaried employees”: an agent is very frequently an independent business man and usually receives in compensation for his services a share proportionate to the proceeds of the business transacted by him for his principal.

“Salaried employees” comprise, among others, “bookkeepers and accountants” and “stenographers and typewriters”; the former include expert accountants conducting their own offices, and the latter include public stenographers. Still the number of such accountants and stenographers is very small, as compared with those employed on a salary in commercial and industrial

establishments; they may, therefore, safely be classed with other "salaried employees."

"Selling force" comprises salesmen and saleswomen and bundle boys who are commonly considered as belonging to the clerical force, as distinguished from wage-earners who perform manual labor.

"The quasi-professional" comprise letter and mail carriers and pilots; the reasons for segregating them into a distinct group are stated below in the paragraph on "Domestic and Personal Service."

"Industrial wage-earners" include occupations whose designation clearly indicates the character of employment. Where the distinction between employers and employed was not apparent, the occupation was included among the "unclassified." For example, "carriage and hack drivers" are classed as wage-earners, because there is a separate occupation described as "livery stable keepers"; but "draymen, teamsters, and expressmen" are considered as insufficiently specified, inasmuch as there are a number of draymen and expressmen who are in business for themselves, while a large number of teamsters and expressmen are employed by others.

The group "Unclassified" includes draymen, teamsters and expressmen, packers and shippers, decorators, drapers and window dressers, newspaper carriers and newsboys, weighers, gaugers and measurers, and "not specified."

Manufacturing and mechanical pursuits.—The returns of occupations are in themselves wholly inadequate for the purpose of the present classification. The instructions given to the enumerators required them to distinguish between employers and employees and to report the former as "manufacturers" (No. 211). These instructions, however, were not followed. But the Census of Manufactures of 1900 and the Census of Mines and Quarries of 1902 ascertained the number of persons engaged in manufacturing and mechanical pursuits, distinguished as proprietors and firm members (or mine operators), salaried employees, and wage-earners. A comparison of the returns of the latter with the number of persons enumerated by the Census of Occupations shows a very close agreement of the results.

Table I of the report on Occupations included butchers, fishermen and oystermen, oil well employees, miners and quarrymen, and officials of mining and quarrying companies; none of these are included in the statistics of manufactures. Likewise, electric light and power is not included in the Census of Manufactures. Eliminating these classes from the total engaged in manufacturing and mechanical pursuits, we obtain 6,317,801 persons as the number which is comparable with the returns of the Census of Manufactures.

The number of persons engaged in manufactures was reported by the Census of Manufacturers as follows:⁴

Proprietors and firm members	708,738
Officers of corporations *	48,200
Wage-earners, average number	5,373,108
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Total	6,130,046

* See General Table III.

The number of salaried employees is here not taken into consideration, because all persons employed in an administrative or clerical capacity, with one exception, are classed in the statistics of occupations as engaged in "trade and transportation." The exception referred to is the group described as "Manufacturers and Officials," which includes 158,070 persons. This number is far short of the number of "proprietors and firm members" reported by the Census of Manufactures. Obviously in all "hand trades" proprietors were reported merely as craftsmen (carpenters, plumbers, etc.); others must have found lodgment in the "Not Specified" groups, under the general head, "Miscellaneous Industries," which embraces also "Manufacturers and Officials." The two totals of persons engaged in manufactures accordingly compare as follows:

Source of Information	Total Number
Statistics of occupation	6,317,801
Statistics of manufactures	6,130,046
Difference	187,755

⁴ Manufactures, Part I, p. xlviii, Table II.

This discrepancy is easily accounted for by the fact that the number of wage-earners returned by the Census of Manufactures is an average computed on the basis of 300 working days for every person employed, whereas in reality some wage-earners were unemployed during a portion of the year; the actual number of wage-earners engaged in manufactures was, therefore, higher than the average. The enumeration of persons engaged in gainful occupations would naturally bring out the actual number of wage-earners. The difference between the two totals, amounting to 3.6 per cent of the average number, represents the annual unemployment apportioned among all the wage-earners. It would show an average loss of 10 days per wage-earner during the year from unemployment. In all probability, the average unemployment exceeded this figure; the average number of wage-earners in manufactures may have included some persons who were, during a part of the year, engaged in other divisions, e.g., in trade and transportation.

The close agreement of the returns of occupations and manufactures must be accepted as proof of their substantial accuracy. Taking the total number returned by the Census of Population as the actual number of persons engaged in manufactures and mechanical pursuits, and subtracting therefrom the number of proprietors and officers of corporations and firm members returned by the Census of Manufactures, we arrive at the number of wage-earners, as shown in the following statement:

Total number	6,317,801
Officers of corporations	48,200
Proprietors and firm members.....	708,738
Wage-earners	5,560,863

In order to distribute each group by sex, a few calculations are necessary, for which we possess the following data:

Total engaged in manufactures.....	6,317,801
Males	5,005,736
Females	1,312,065
Total wage-earners	5,560,863

Average number :

Males 16 years and over *	4,110,527
Females 16 years and over *	1,029,296
Children actually employed †	256,454
Establishments with a product of less than \$500 ‡	64,702
Excess of actual over average number.....	99,884

* Manufactures, Part I, Table I.

† Occupations, Table VIII.

‡ Manufactures, Part I, p. xlviii, Table II.

The actual and the average number of children employed in manufactures compare as follows:

Actual number	256,454
Average number	168,583
Difference	87,871

This difference accounts for a part of the excess of the actual over the average number of wage-earners computed above at 187,755, reducing it to 99,884.

The number of children in the statistics of manufactures is not distributed by sex. But Table X of the Report on Occupations shows the number of persons 10 to 15 years of age classified by occupations and sex. It may safely be assumed that the number of persons so classified represents none but wage-earners. The number of children from 10 to 15 years employed in oil wells is not separated from those employed in oil works and is therefore not subtracted; as the total employed in both branches is but 208 boys, it cannot affect the result. Eliminating, as above, butchers, fishermen, oystermen, miners, and quarrymen, we obtain the following results:

	Number	Percentage
Children engaged in manufactures..	256,454	100
Males.....	143,335	56
Females.....	113,119	44

The actual number of children in manufactures and mechanical pursuits is very largely in excess of the average num-

ber, which may be due partly to incomplete returns furnished by manufacturers; but it is more probably explained by the fact that the younger ones among the children are employed only during a part of the year when the schools are closed. An analysis of the figures for each year age-group would seem to corroborate this view.

Adding the number of children of each sex to the number of adults employed in the same establishments we obtain the following results:

Wage-Earners Employed in Establishments with a Product of \$500 and Over	Total	Males	Females
Average number, 16 years and over.....	5,139,823	4,110,527	1,029,296
Children under 16 years.....	250,454	143,335	113,119
Total.....	5,390,277	4,253,862	1,142,415
Percentage.....	100	79	21

We thus find that the percentages of males and females among all wage-earners, regardless of age, were 79 and 21 per cent respectively. Applying these percentages as coefficients to the 64,702 persons employed in establishments with a product of less than \$500 and to the excess of 99,884 persons over the average number, we arrive at the following estimated distribution by sex of all wage-earners employed in manufactures:

	Total	Males	Females
Wage-earners in establishments with a product of \$500 and over.....	5,390,277	4,253,862	1,142,415
Excess of actual over average number employed, and persons employed in establishments with a product less than \$500.....	164,586	130,023	34,563
Total.....	5,560,863	4,383,885	1,176,978

To distribute the 48,200 officers of manufacturing corporations by sex, we may assume that the ratio of the sexes among them, on the average, is the same as shown in Table I of the report on Occupations, for officials of other industrial occupations. The respective numbers are given in the following statement:

	Total	Males	Females
Officials (insurance and trust companies, etc.).....	5,339	5,227	112
Officials (trade companies).....	20,479	20,002	477
Officials (transportation companies).....	34,133	33,722	411
Officials (mining and quarrying companies).....	17,935	17,833	102
Total.....	77,886	76,784	1,102
Percentage.....	100.0	98.6	1.4

At the same percentage ratio the 48,200 officers of manufacturing corporations will number 47,525 males and 675 females.

Having thus distributed all wage-earners and officers of corporations by sex, we subtract their numbers from the totals of all persons engaged in manufactures and obtain the number of proprietors and firm members distributed by sex, as shown next below :

	Total	Males	Females
All persons engaged in manufactures.	6,317,801	5,005,736	1,312,065
Wage-earners.....	5,560,863	4,383,885	1,176,978
Officers of corporations.....	48,200	47,525	675
Proprietors and firm members.....	708,738	574,326	134,412

Coming to Mines and Quarries we find in Table I of the report on Occupations the following data for 1900 :

	Number
Oil well employees.....	18,011
Miners and quarrymen	570,535
Officials of mining and quarrying companies.....	17,935
Total	606,481

According to the instructions of the census agents, miners and quarrymen were to include only wage-earners. It is doubtful, however, whether the census agents strictly followed their instructions. In many branches of the mining industry there are operators who lease an oil well or a "block" in a mine, which they operate on their own account, and sell their whole product

to the lessor. They seldom employ hired labor and are in every respect mine workers; yet they are not wage-earners. A comparison with the results of the census of mines shows that operators of this class were not returned as mine owners.

Table I of the Report on Mines and Quarries gives the number of persons engaged in mining and quarrying in 1902 as follows:

Number of operators	46,858
Wage-earners in oil wells, average number.....	17,552
In all other mining industries	564,176

The number of "operators" includes incorporated companies, partnerships, and miscellaneous forms of ownership. To arrive at the number of individuals who belong to the class of "operators," incorporated companies and miscellaneous forms of ownership must be eliminated from the number of operators. The results are shown in the following table:

Operators	Individuals	Partnerships
In mines and quarries.....	8,460	3,718
In oil wells:		
Reporting personally.....	107	69
Reported by the Standard Oil Co.....	28,924
Total.....	37,491	3,787

The total number of proprietors and firm members was not reported by the Census of Mines and Quarries of 1902. We may take, however, the data of the Census of Manufactures as a basis.

The total number of establishments conducted by individuals was 372,703 and the number of partnerships was 96,715 (Manufactures, Part I, p. lxvi). The total number of proprietors and firm members was 572,611 (p. 58). From these data the following table is compiled:

Character of Organization	Establishments	Proprietors
Individual.....	372,703	372,703
Partnership.....	96,715	199,908
Total.....	469,418	572,611

This gives an average of 2.07 members per partnership. Taking an average of 2 members to each of the 3,787 mining partnerships, we obtain an estimated total of 7,600 firm members. Adding this number to that of individual operators, we obtain 45,091 as the total number of proprietors and firm members, or in round numbers, 45,000. This is far in excess of the 17,935 officials of mining and quarrying companies, reported by the Census of Occupations. On the other hand, the Report on Mines and Quarries shows only 4,591 general officers of mining and quarrying companies. Evidently, the difference between these two figures, 13,344, represents mine owners. If we eliminate from the estimated total of 45,000 operators those 28,924, for whom reports were made by the Standard Oil Co., the balance, a little over 16,000, does not differ greatly from the former number of mine owners. Presumably the mine "operators" of the transition type have been reported as "miners."

The returns from both sources compare as follows:

	Census of Mines and Quarries, 1902	Census of Occupa- tions, 1900
Operators (individual and firm members).....	45,000	17,935
General officers of corporations.....	4,591	
Wage earners:		
In oil wells.....	17,552	18,011
In all other mines.....	564,176	570,535
Total.....	631,319	606,481

The excess of the total in the first column over the total in the second may in part be accounted for by the difference in the date of the two censuses; it is also probable that a part of the mine operators of the indefinite type have been reported among the "not specified" under Miscellaneous industries, where manufacturers and officials of mining and quarrying companies are shown. In the latter case their number has been credited to wage-earners in manufacturing and mechanical pursuits; the error will be equalized, if we subtract the 45,000 operators

and 4,591 officers of mining corporations from the total number engaged in mining, as reported by the Census of Occupations. This will result in the following distribution:

Operators	45,000
General Officers	4,591
Wage-earners	556,890
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Total	606,481

As regards distribution by sex, the data for wage-earners and officers of corporations taken from the report on Occupations are shown below:

	Total	Males	Females	Percentage
Oil well employees.....	18,011	18,001	10
Miners and quarrymen.....	570,535	569,541	994
Total wage-earners.....	588,546	587,542	1,004	0.17
Officials of mining and quarrying companies.....	17,935	17,833	102	0.57
All persons engaged in mining.....	606,481	605,375	1,106

Applying these percentages to the numbers of wage-earners and general officers, computed above, and deducting the resultant numbers from the total, we arrive at the distribution of operators by sex. The results are shown in the following table:

	Total	Males	Females
All persons engaged in mining.....	606,481	605,375	1,106
Wage-earners.....	556,890	556,043	847
Officials of corporations.....	4,591	4,565	26
Operators.....	45,000	44,767	233

The following is a summary of the preceding calculations and comprises all persons 10 years of age and over engaged in manufactures and mechanical pursuits, classified by social-economic groups, and by sex.

	Total	Males	Females
Entrepreneurs.....	753,738	619,093	134,645
Proprietors and firm members, manu- factures.....	708,738	574,326	134,412
Operators mines and quarries.....	45,000	44,767	233
Salaried employees.....	52,791	52,090	701
Officers of corporations:			
Manufactures.....	48,200	47,525	675
Mines and quarries.....	4,591	4,565	26
Wage-earners.....	6,117,753	4,939,928	1,177,825
Manufactures.....	5,560,863	4,383,885	1,176,978
Mines and quarries.....	556,890	556,043	847
Unclassified.....	188,022	185,839	2,183
Oystermen and fishermen.....	74,573	72,768	1,805
Butchers.....	113,449	113,071	378
Total, manufactures and mechan- ical pursuits.....	7,112,304	5,796,950	1,315,354

Domestic and personal service.—The “entrepreneurs” of this census division include boarding and lodging-house keepers, hotel keepers, restaurant keepers and saloon keepers, and proprietors of steam laundries.

“Wage-earners” (except servants) include bartenders, janitors, laborers, waiters, and employees in steam laundries, while “servants” are segregated into a separate group.

The quasi-professional group comprises trained nurses, midwives, soldiers, United States sailors and marines, firemen (fire department), hunters, trappers, guides, and scouts. Persons engaged in these occupations are largely salaried employees in public, benevolent, and religious institutions, and some, like trained nurses, midwives, guides, etc., follow their vocation independently, serving the general public. With respect to the manner of compensation, as well as to the character of service, these occupations resemble those described as “professional service.”

The number engaged in steam laundries is reported as follows: total, 21,957; males, 12,024; females, 9,933.

It may reasonably be assumed that the ratio of employers to wage-earners is here the same as in all other industries. The percentage of employers to the total number engaged in manufactures is equal to 11 per cent, and the percentage of females among the employers to 18 per cent. We accordingly arrive at the following classification:

Steam Laundries	Total	Males	Females
Proprietors.....	2,415	1,980	435
Wage-earners.....	19,542	10,044	9,498
Total.....	21,957	12,024	9,933

Another classification, based upon the percentages of employers and wage earners for each sex, gives the following results:

	Total	Males	Females
Proprietors.....	2,361	1,407	954
Wage-earners.....	19,596	10,617	8,979
Total.....	21,957	12,024	9,933

Both calculations are very close, except as to the number of female proprietors; but the difference of 519 female employers is too insignificant to affect the final results. We may, therefore, adopt the following approximation:

	Total	Males	Females
Proprietors.....	2,400	1,700	700
Wage-earners.....	19,557	10,324	9,233
Total.....	21,957	12,024	9,933

Unclassified.—The occupations not classified by social-economic groups, are enumerated next below:

	Total	Males	Females
Aggregate.....	1,740,501	1,226,812	513,689
Turpentine farmers and laborers.....	24,735	24,454	281
Wood choppers.....	36,265	36,152	113
Lumbermen and raftsmen.....	72,190	72,090	100
Barbers and hairdressers.....	131,383	125,801	5,582
Housekeepers and stewards.....	155,524	8,421	147,103
Launderers and laundresses (hand work) .	365,056	39,278	325,778
Watchmen, policemen, and detectives....	116,615	115,736	879
Bootblacks.....	8,243	8,158	85
Draymen, teamsters, and expressmen....	504,321	503,458	863
Packers and shippers.....	59,769	39,781	19,988
Decorators, drapers, and window dressers.	3,053	2,757	296
Newspaper carriers and newsboys.....	6,904	6,835	69
Weighers, gaugers, and measurers.....	6,670	6,491	179
Butchers.....	113,449	113,071	378
Fishermen and oystermen.....	74,573	72,768	1,805
Not specified.....	61,751	51,561	10,190
Trade and transportation.....	34,056	30,903	3,153
Domestic and personal service.....	23,462	16,621	6,841
Agricultural pursuits.....	4,233	4,037	196

The reason "Housekeepers and stewards" are included among the "unclassified" is that some belong to the group of "wage-earners," others to that of "salaried employees," and still others to the "servant" class.

TABLE I
PERSONS ENGAGED IN GAINFUL OCCUPATIONS, CLASSIFIED BY SEX AND SOCIAL-
ECONOMIC GROUPS; NUMBER AND PERCENTAGES, 1900

	NUMBER			PERCENTAGES		
	Total	Male	Female	Total	Male	Female
All groups.....	29,287,070	23,957,778	5,329,292	100.0	100.0	100.0
1. Farmers.....	5,823,349	5,511,389	311,960	19.9	23.0	5.8
2. Agricultural laborers, members of family.....	2,366,313	1,925,247	441,066	8.0	8.0	8.2
3. Agricultural laborers, hired help.....	2,093,933	1,868,308	224,725	7.1	7.9	4.2
4. Entrepreneurs.....	2,103,898	1,855,326	248,572	7.2	7.7	4.7
5. Professional and quasi- professional.....	1,579,205	1,037,373	541,832	5.4	4.8	10.1
6. Agents and commercial travelers.....	334,269	322,763	11,506	1.1	1.3	0.2
7. Salaried employees....	1,189,079	937,786	251,293	4.1	3.9	4.7
8. Selling force.....	622,295	468,647	153,648	2.1	1.9	3.0
9. Industrial wage-earners	9,977,118	8,588,309	1,388,809	34.1	35.9	26.0
10. Servants.....	1,458,010	215,818	1,242,192	5.0	0.9	23.3
11. Unclassified.....	1,740,501	1,226,812	513,689	6.0	4.7	9.8

The number of males above the age of 10 engaged in gainful occupations in 1900 was 23,753,836; the total number of males above the age of 10 was 29,703,440. The age limit being so low, it is quite natural that there should be a large excess of persons not engaged in gainful occupations. A comparison of these groups by ages discloses, however, the existence in every age group of a disparity between all males and those engaged in gainful occupations. This is shown in the following table:

TOTAL NUMBER OF MALES AND PERSONS ENGAGED IN
GAINFUL OCCUPATIONS, BY AGE GROUPS

Age Groups	Total Number	Engaged in Gainful Occupations	Difference
Total, 10 years and over	29,703,440	23,753,836	5,949,604
10 to 15 years	4,852,427	1,264,411	3,588,016
16 to 20 years	3,716,714	2,855,425	861,289
21 to 64 years	19,451,458	18,494,195	957,263
65 years and over	1,555,418	1,063,856	491,562
Age unknown	127,423	75,949	51,474

There were, accordingly, nearly a million males between 21 and 64 years of age not engaged in gainful occupations, i.e., 4.9 per cent of the total number of males between the same age limits. What were their means of support? The Census report on Occupations indirectly expresses the supposition that they probably "have acquired a competence enabling them to give up work" (p. cxix). While this may be true to a limited extent, the percentages of productive workers classified by race, nativity, and age groups argue against this supposition. Thus the foreign white between 21 and 55 years of age show from 2.7 to 4.4 per cent of persons without occupation and the negroes from 3 to 6.4 per cent. It is hardly probable that 6.4 per cent of the negroes between 21 and 64 years of age have saved up enough to live without work.

A partial answer to this query may be found in the statistics of defective, pauper, and criminal classes.

The insane.—The number of insane males between the ages of 20 and 64 enumerated in hospitals, December 31, 1903, was

68,454 ("Insane and Feeble-minded in Hospitals and Institutions, 1904," p. 123). The number of feeble-minded males of the same ages in institutions in 1904 was 3,283 (*ibid.*, p. 223).

The blind.—The number of blind males 20 years of age and over, in 1900, was 32,418 ("The Blind and the Deaf, 1900," pp. 32, 33). Of this number, however, there were engaged in gainful occupations 10,328 (*ibid.*, pp. 52-54). This leaves 22,090 blind males above the age of 20 who were not so engaged. A portion of these were 65 years of age and over; their number, however, is not stated, and there is no basis for estimating it.

The deaf.—The number of deaf males 20 years of age and over, in 1900, was 36,744 (*ibid.*, p. 196). Of this number there were engaged in gainful occupations 25,225 persons (*ibid.*, pp. 243, 246), which leaves 11,519 deaf persons not so engaged. The number of those among them who were 65 years of age and over cannot be ascertained.

The blind-deaf.—Of the total number of blind persons 4.28 per cent were also deaf ("The Blind and the Deaf," p. 18). It may be assumed that none of the persons so afflicted were engaged in gainful occupations. The males 20 years of age and over would number at the above percentage rate, 1,387, or in round numbers, 1,400 persons. This number must be subtracted from the number of blind males, in order to avoid duplications.

Paupers in almshouses.—The number of male paupers enumerated in almshouses, December 31, 1903, who were between 20 and 64 years of age, was 27,312 ("Paupers in Almshouses, 1904," pp. 132-34). There were among these paupers a number of defectives, who have been included above among the insane, blind, and deaf. The number of such persons of all ages was as follows: insane, 4,105; feeble-minded, 8,473; blind, 1,943; deaf-mute, 351; making in all 14,872 males out of a total of 40,869 male paupers in almshouses (*ibid.*, p. 182), which is equal to 36.3 per cent. Applying this percentage to the number of males between 20 and 64 years of age and subtracting the result from the total number of male paupers of

that age, we estimate the number of all other male paupers between those ages at 17,398, or, in round numbers, at 17,400 persons.

Inmates of benevolent institutions.—The total number of men who were inmates of permanent homes on January 1, 1904, was 54,800, and the number of men in temporary homes, 5,189 ("Benevolent Institutions, 1904," pp. 38 and 44). How many of them were 65 years of age and over, is not stated.

Prisoners.—The Census Report on Prisoners in 1904 contains no age statistics of prisoners in penal institutions on a stated day; but the percentages derived from the statistics of prisoners committed during that year may be applied to the number of prisoners enumerated on June 30, 1904, and the number of male able-bodied prisoners can thus be estimated ("Prisoners," Table xxxiii, pp. 188-91).

The total number of male prisoners committed in 1904 was 136,365, of whom 108,671 were between the ages of 21 and 59, both inclusive, making 79.9 per cent.

The total number of male prisoners on June 30, 1904, was 77,269; the estimated number of persons between 21 and 59 years of age, at the above percentage, was 61,042 persons, or in round numbers 61,000.

Recapitulation.—The total number of defective, pauper, and criminal classes is shown in the following summary:

	Males
Insane in hospitals, 20 to 64 years, December, 31, 1903	68,454
Feeble-minded in institutions	3,283
Blind, 20 years and over, 1900, less 1,400 blind-deaf..	20,690
Deaf, 1900	11,519
Paupers in almshouses, December 31, 1903, exclusive of defective paupers	17,400
Inmates of benevolent institutions, January 1, 1904..	59,989
Prisoners, 20 to 59 years, June 30, 1904	61,000
	<hr/>
Total	242,335

The total number of persons between 21 and 65 years of age, who were not returned as engaged in gainful occupa-

tions, was 957,263. This leaves 714,928, or, in round numbers, over 700,000 persons of productive ages, for whom the census returns show no occupation. This number, probably, includes some retired business and professional men. The presence, however, of 769,477 married women in the class engaged in gainful occupations may indicate that a portion of the 700,000 adult men under 65 who are not engaged in gainful occupations are supported by the earnings of their wives.

II. SOCIAL-ECONOMIC GROUPS IN 1870-1900

Variations in the plans of classification of occupations followed at the Ninth, Tenth, Eleventh, and Twelfth Censuses necessitate corresponding modifications in the arrangement of occupation groups into social-economic groups for the years 1870, 1880, and 1890, as compared with 1900.

The deviations from the classification adopted in the preceding section are explained below.

The details of the classification of occupations into social-economic groups for the years 1870, 1880, and 1890 are given in Tables IV, V, and VI.

Agricultural pursuits.—Agricultural laborers residing with and working for the head of the family had to be combined with hired help. Percentage comparisons of the number of farmers and agricultural laborers are in a degree misleading, owing to difference in methods of classification between the several censuses.

At the Twelfth Census farmers' children who help on the farm were returned as agricultural laborers, which was not done at previous censuses. The increase of the number of agricultural laborers, resulting from this change of classification, is estimated at 578,740 males under 16 ("Statistics of Agriculture," Part I, p. lxxviii); the increase of males above that age and of females, helping the heads of their families, must have added considerably to this number. On the other hand there was a very large excess of persons returned as farmers over the number of farms at the Tenth and Eleventh

Censuses: 818,326 in 1890, and 292,704 in 1880. In accordance with the classification followed in 1900, they should have been reported as farm laborers. In 1900, on the other hand, the excess of the number of farms was 36,920 ("Statistics of Occupations," pp. lxxii and lxxiii).

In order to make the returns of the Twelfth Census comparable with those of the previous censuses, the males under 16 reported in 1900 as farm laborers are deducted from the number of agricultural laborers. The corresponding element of the female population is disregarded, the effect of its inclusion manifesting itself only in fractions of 1 per cent: the total number of females under 15 engaged in agriculture in 1900 was returned as 83,816, and the total number of females in gainful occupations under 16 in 1900 was 207,283 (Eleventh Census, "Population," Part II, p. cxxiii; Twelfth Census, "Occupations," p. 16); the difference, 123,467 persons, making no allowance for the natural increase of this group, was less than one-half of 1 per cent of all gainful workers.

"Farm and plantation overseers" were not shown as a separate occupation group at the Eleventh Census, being combined with "farmers and planters." With the exception of that census this group has been classified in the preceding table with "salaried employees." The total number of persons in this group was: in 1900, 17,067; in 1880, 3,106; in 1870, 3,609, which was less than 0.1 per cent of all persons employed in gainful occupations at each census and could not affect the relative places of the several social-economic groups.

Domestic and personal service.—No distinction was made in 1890 between "servants" and "waiters," both occupations being combined in the group of "servants." The number of waiters in 1900 was 107,430, which was less than 0.4 per cent of all persons engaged in gainful occupations.

"Bartenders" were combined in 1870 and 1880 with "saloon-keepers" or "barkeepers." The number and relative percentage of persons in each of these occupations at the Eleventh and Twelfth censuses are shown in the following statement:

	Number		Percentage	
	1900	1890	1900	1890
Total number.....	172,563	127,191	100	100
Saloonkeepers.....	83,746	71,385	49	56
Bartenders.....	88,817	55,806	51	44

The number of bartenders in 1870 and 1880 may be estimated by taking 44 per cent of the combined number of "saloonkeepers and bartenders," or "barkeepers," and "billiard and bowling saloonkeepers and employees." The ratio for the year 1890 is taken in preference to that for 1900 in view of the trend in 1890-1900 toward concentration, manifested in the relative decrease of the number of proprietors as compared with the number of employees in the liquor traffic. The aggregate number of persons in these two classes was: in 1880, 70,004; in 1870, 15,582; amounting to 0.4 per cent and 0.1 per cent, respectively, of all persons engaged in gainful occupations. The possible error in the estimate may therefore be disregarded.

Manufactures and mechanical pursuits.—The manner in which the number of persons engaged in manufactures and mechanical pursuits in 1900 has been classified into proprietors and wage-earners has been explained above. In the following tabular statement the number of wage-earners, as returned by the census of manufactures, is compared with the total number of persons engaged in manufactures and mechanical pursuits, as returned by the statistics of occupations:

YEAR	PERSONS ENGAGED IN MANUFACTURES AND MECHANICAL PURSUITS	WAGE-EARNERS	
		Number	Percentage Ratio to Persons Engaged in Manufactures and Mechanical Pursuits
1900.....	7,085,309	5,316,802	75
1890.....	5,678,468	4,251,613	75
1880.....	3,784,726	2,732,595	72
1870.....	2,677,765	2,053,996	76

The ratio of wage-earners to the total number of persons reported as engaged in manufactures and mechanical pursuits has undergone practically no change between 1870 and 1900. The method applied to the returns of the Twelfth Census is therefore equally applicable to the returns of previous censuses.

The number of mine operators was not reported separately prior to 1900, being obviously included among "miners." In the census of mines and quarries the number of "wage-earners" is given for 1870, 1880, 1890. But prior to 1890 mining was largely pursued by small, independent operators without hired labor; many "miners" reported as "wage-earners" doubtless belonged to that class. For this reason the numbers of "wage-earners" reported in the Census of Mines and Quarries for 1870 and 1880 are relegated here to the "unclassified."

The results are shown in detail in the table next below :

ALL PERSONS ENGAGED IN MANUFACTURES AND MECHANICAL
PURSUITS CLASSIFIED BY SOCIAL-ECONOMIC
GROUPS: 1870, 1880, 1890

	1890	1880	1870
All persons.....	5,678,468	3,784,726	2,677,765
Unclassified:			
Butchers.....	105,456	76,241	44,354
Fishermen and oystermen....	60,162	41,352	27,106
Wage-earners:			
Manufactures.....	4,251,613	2,732,595	2,053,996
Mines and quarries.....	523,710	205,991	163,185
Manufacturers and officials....	737,527	638,547	389,124

Salaried employees.—The occupations making up in Table I the social-economic group described as "Selling force" could not be segregated for the previous censuses from the clerical help and have therefore been combined with salaried employees.

Changes in the relative places of the several social-economic groups from 1870 to 1900.—Lack of uniformity in the method of classification of farm workers has resulted, on the one hand, in a drop of the percentage of farmers from 24 per cent in 1890 to 20.4 per cent in 1900, while the changes during the preceding decennial periods did not exceed a fraction of 1

TABLE II
NUMBER AND PERCENTAGE DISTRIBUTION OF PERSONS 10 YEARS OF AGE AND OVER ENGAGED IN GAINFUL OCCUPATIONS,
CLASSIFIED BY SOCIAL-ECONOMIC GROUPS, IN CONTINENTAL UNITED STATES, 1870, 1880, 1890, 1900

	1900	1890	1880	1870	1900	1890	1880	1870
All groups.....	28,494,493	22,735,661	17,392,099	12,505,923	100.0	100.0	100.0	100.0
1. Farmers and planters.....	5,816,828	5,444,555	4,336,016	3,030,388	20.4	24.0	24.9	24.3
2. Agricultural laborers.....	3,832,137	3,004,061	3,323,876	2,885,996	13.5	13.2	19.1	23.1
3. Entrepreneurs.....	2,100,245	1,796,885	1,347,991	905,465	7.3	7.9	7.8	7.2
4. Professional and quasi-pro- fessional.....	1,476,390	1,031,613	699,545	436,140	5.2	4.5	4.0	3.5
5. Agents and commercial travelers	334,089	233,273	62,147	27,387	1.2	1.0	0.4	0.2
6. Salaried employees, including selling force.....	1,806,746	1,141,883	559,510	328,841	6.3	5.0	3.2	2.6
7. Industrial wage-earners.....	9,943,663	7,426,024	5,129,799	3,429,185	34.8	32.7	29.5	27.4
8. Servants.....	1,453,763	1,454,791	1,075,055	975,734	5.1	6.4	6.2	7.8
9. Unclassified.....	1,730,632	1,202,576	837,560	486,787	6.2	5.3	4.9	3.9

TABLE III
NUMBER AND PERCENTAGE DISTRIBUTION OF PERSONS 10 YEARS OF AGE AND OVER ENGAGED IN GAINFUL
OCCUPATIONS, OTHER THAN AGRICULTURE, 1870, 1880, 1890, 1900

	1900	1890	1880	1870	1900	1890	1880	1870
All groups.....	18,708,105	14,169,735	9,681,330	6,560,971	100.0	100.0	100.0	100.0
Entrepreneurs.....	2,100,245	1,796,885	1,347,991	905,465	11.2	12.7	14.0	13.8
Professional and quasi-pro- fessional.....	1,476,390	1,031,613	609,545	436,140	7.9	7.3	7.2	6.6
Agents and commercial travelers...	334,089	233,273	62,147	27,387	1.8	1.6	0.6	0.4
Salaried employees, including selling force.....	1,806,746	1,141,883	559,510	328,841	9.7	8.1	5.8	5.0
Industrial wage-earners.....	9,943,663	7,426,024	5,129,799	3,429,185	53.1	52.3	53.0	52.3
Servants.....	1,453,763	1,454,791	1,075,655	975,734	7.8	10.3	11.1	14.9
Unclassified.....	1,593,209	1,085,266	806,683	458,219	8.5	7.7	8.3	7.0

per cent, and, on the other hand, in a slight rise of the percentage of agricultural laborers, which had been on the decline from 1870 to 1890.

In order to eliminate the influence of the discrepancies in the enumeration of farm workers upon the relative numbers of other social-economic groups, the table on page 214 shows the proportion of the latter groups in the total number of persons engaged in gainful occupations other than agriculture.

It is worthy of note that, while the total number of persons engaged in gainful occupations more than doubled in the thirty years, which had elapsed between the Ninth and the Twelfth censuses, yet the changes in the percentage distribution of the social-economic groups have been slow. The relative places of the several social-economic groups in the total productive population, exclusive of the farm workers, have scarcely shifted. The gain of the industrial wage-earners in the total productive population has been wholly at the expense of the farm workers; it should be noted, moreover, that the industrial wage-earners attracted only their proportionate quota of the decrease of the agricultural population, the rest being shared by other social-economic groups.

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[To be concluded in next number]